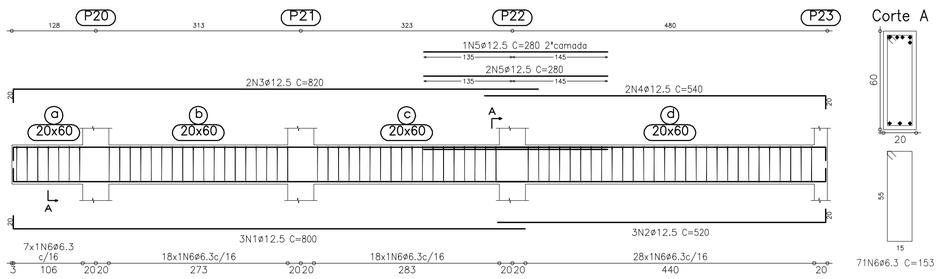
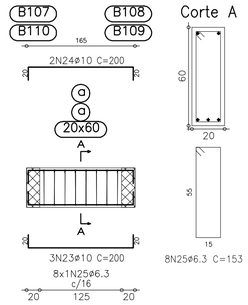
V7



Corte A

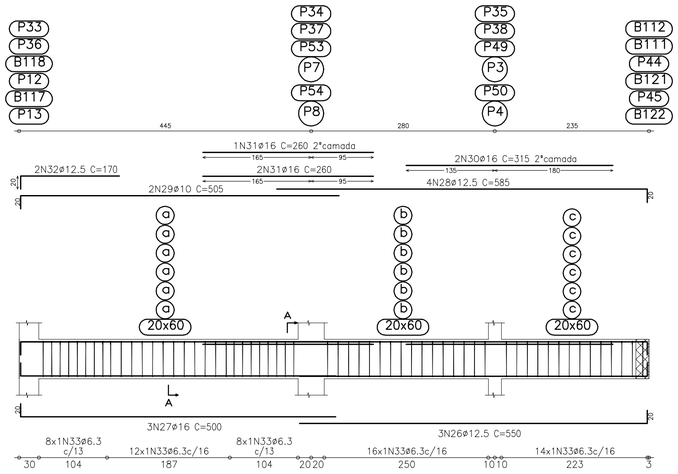
1ª Pavimento
Desenho de vigas
Concreto: C30, em geral
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

V12
V15

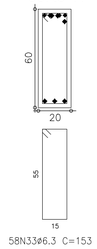


Corte A

V13
V14
V30
V31
V32
V33

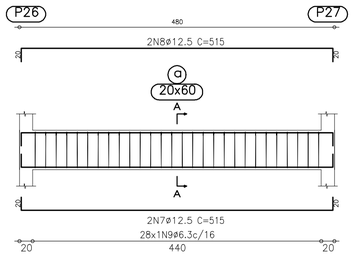


Corte A

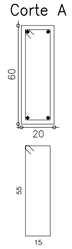


Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
V7	1	ø12.5	3	20	780		800	2400	23.6	
	2	ø12.5	3		500	20	520	1560	15.3	
	3	ø12.5	2	20	800		820	1640	16.1	
	4	ø12.5	2		520	20	540	1080	10.6	
	5	ø12.5	3		280		280	840	8.2	
	6	ø6.3	71				153	10863	26.9	
								Total:	100.7	
V8	7	ø12.5	2	20	475	20	515	1030	10.1	
	8	ø12.5	2	20	475	20	515	1030	10.1	
	9	ø6.3	28				153	4284	10.6	
								Total:	30.8	
V9=V17	10	ø12.5	4	20	755	20	795	3180	31.2	
	11	ø12.5	4	20	755	20	795	3180	31.2	
	12	ø12.5	3		280		280	840	8.2	
	13	ø6.3	38				153	5814	14.4	
								Total:	85.0	
								(x2):	170.0	
V10=V18=V28 V29=V34=V35	14	ø12.5	3	20	575	20	615	1845	18.1	
	15	ø10	3	20	575	20	615	1845	11.6	
	16	ø6.3	28				153	4284	10.6	
								Total:	40.3	
								(x6):	241.8	
V11=V16	17	ø8	4	57	10	57	124	496	1.9	
	18	ø16	4	20	610	20	650	2600	40.8	
	19	ø16	2		610		610	1220	19.2	
	20	ø8	2	20	610	20	650	1300	5.1	
	21	ø12.5	6	20	140		160	960	9.4	
	22	ø6.3	36				153	5508	13.6	
								Total:	90.0	
								(x2):	180.0	
V12=V15	23	ø10	3	20	160	20	200	600	3.8	
	24	ø10	2	20	160	20	200	400	2.5	
	25	ø6.3	8				153	1224	3.0	
								Total:	9.3	
								(x2):	18.6	
V13=V14=V30 V31=V32=V33	26	ø12.5	3		530	20	550	1650	16.2	
	27	ø16	3	20	480		500	1500	23.6	
	28	ø12.5	4		565	20	585	2340	23.0	
	29	ø10	2	20	485		505	1010	6.3	
	30	ø16	2		315		315	630	9.9	
	31	ø16	3		260		260	780	12.2	
	32	ø12.5	2	20	150		170	340	3.3	
	33	ø6.3	58				153	8874	21.9	
								Total:	116.4	
								(x6):	698.4	
								ø6.3:	294.5	0.0
								ø8:	14.0	0.0
								ø10:	120.0	0.0
								ø12.5:	617.6	0.0
								ø16:	394.2	0.0
								Total:	1440.3	0.0

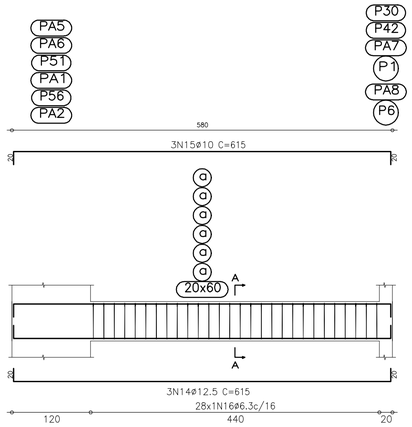
V8



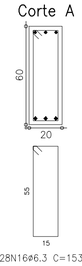
Corte A



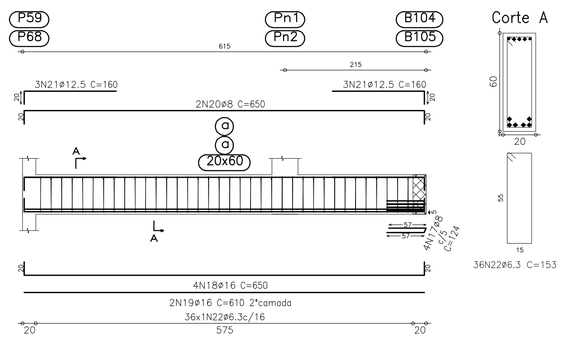
V10
V18
V28
V29
V34
V35



Corte A



V11
V16

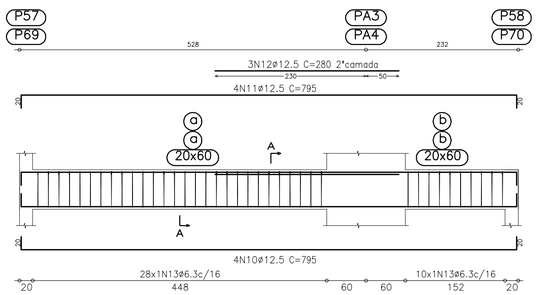


Corte A

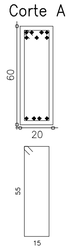
Pilar ou muro apoiado:Pn1 e Pn2

Ver esperas no detalhamento de pilares ou vista de muros

V9
V17



Corte A



FCK=30.0 MPa - FATOR H_2O/CIMENTO=0.58

ARMADURA DAS VIGAS DO 1° PAVIMENTO (02/03)

ESCALA 1/50 - ESCALA 1/20 (CORTES)

leão projetos complementares

DATA	REVISÃO/ALTERAÇÃO
07/03/2015	REVIDO - PLOTAGEM INICIAL

PROJETO ESTRUTURAL CONCRETO

OBRA:
ARENA - CENTRO DE EVENTOS

PROPRIETÁRIO:
PREFEITURA MUNICIPAL DE SÃO JORGE DO IVAI

CONTEÚDO:
ARMADURA DAS VIGAS DO 1° PAVIMENTO (02/03)

LOCAL: RUA DR. MICHEL FELIPE - LOTE 126-B - GLEBA ANDIRÁ - SÃO JORGE DO IVAI - PARANÁ

141220-EST_L3_R0.dwg

DATA: MARÇO/2015

RESPONSÁVEL TÉCNICO PELO PROJETO

Nº PÁGINAS
23/28

PAULO LEÃO
ENGENHEIRO CIVIL
CREA - PR-72.041/D

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pauloleao@leaoprojetos.com.br
www.leaoprojetos.com.br

Todos os desenhos e detalhes constantes confirmam Direitos Autorais Reservados conforme Lei Federal nº 9610 de 19/02/98 publicado no D.O.U. em 20/02/98